

REMARKS/ARGUMENTS

ClaimsClaim Objections - Claims 1 – 3, 8 and 10

The Office Action suggested replacing the phrase “cancer gene therapeutic drug” with “composition comprising a carrier cell for gene therapy in treating cancer”. Applicants have amended Claims 1 – 10 to make the suggested change.

35 U.S.C. § 102(b) Rejection of Claims 1, 3 and 10

The Office Action rejected Claims 1, 3, and 10 under 35 U.S.C. 102(b) as being anticipated by Hamada et al. 2003, or as being anticipated by Tsukuda et al., 2002, or as being anticipated by Li [US7,026,164].

The Applicants disagree with the conclusion of the Office Action that Hamada 2003, Tsukuda 2002 or Li '164 disclose, each and every feature, of Claims 1, 3, and 10; and Traverse.

The present invention is directed to a composition comprising a carrier cell for gene therapy in treating cancer including a carrier cell to be infected with an oncolytic virus, so as to make the oncolytic virus act on a tumor cell within a living body, wherein the carrier cell is selected from the group consisting of A549 cells, SW626 cells, and HT-3 cells.

The composition of the present invention can achieve excellent antitumor effects both in *vitro* and *in vivo*. This effect of the present invention is demonstrated in the specification. For example, Figure 1 shows that A549 cells, SWS626 cells and HT-3 cells have significantly higher antitumor effects compared to other cell lines. As shown in Figure 4, these carrier cells (HT-3, SW626 and A549) when infected with adenovirus achieve significantly higher antitumor effect. The *in vivo* antitumor effects achieved by the composition of the present invention are demonstrated in Examples 2 to 6.

In contrast, the cited references - Hamada 2003, Tsukuda 2002 & Li '164 – do not mention the use of carrier cells. These references only teach that PA-1 cells and A549 cells can be used for oncogenesis, virus production or virus proliferation. These references do not specifically teach the use of the disclosed cells as carrier cells. The use of these specific cells as “carrier cells” is an important aspect of the claims and therefore, the failure to disclose the use of

these specifically claimed cells as “carrier cells” in the cited references show they do not anticipate Claims 1, 3 and 10.

The Examiner is requested to withdraw Hamada 2003, Tsukuda 2002 & Li ‘164 as 102(b) Prior Art references. In light of the foregoing arguments and amendments to the claims, the Examiner is respectfully requested to allow Claims 1, 3 and 10.

35 U.S.C. § 103(a) Rejection of Claims 1 and 8

The Office Action rejected Claims 1 and 8 under 35 U.S.C. 103(a) as being obvious over Tsukuda 2002, in view of Molnar-Kimber [WO99/45783].

The Applicants disagree with the conclusion of the Office Action that the combination of Tsukuda 2002 and Molnar-Kimber ‘783 disclose, each and every feature, of Claims 1 and 8, and Traverse.

Neither Tsukuda 2002 nor Molnar-Kimber ‘783 mentions the use of A549, SW626 and HT-3 as carrier cells. It appears that the importance of these specific carrier cells has been overlooked during examination.

In the composition comprising a carrier cell for gene therapy in treating cancer of the present invention, specific carrier cells are identified as suitable for use as carrier cells in the present application, and these cells achieve significantly stronger antitumor effects with the use of oncolytic viruses in the treatment of tumors. The references cited in the Office Action do not teach or suggest the specific features and effects of the present invention.

As mentioned above, an important feature of the present invention is the use of these specific cells as “carrier cells”. The failure to disclose the use of these specifically claimed cells as “carrier cells” in the cited references show they do not individually, or in combination, disclose, each and every feature, of Claims 1 and 8.

The Examiner is requested to withdraw the combination of Tsukuda 2002 and Molnar-Kimber ‘783 as 103(a) Prior Art references. In light of the foregoing arguments and amendments to the claims, the Examiner is respectfully requested to allow Claims 1 and 8.

Amendments to Claims

No New Matter was added by the amendments to the Claims. All amendments to the claims were to correct errors in grammar, style and clarity, and not to narrow the claims to allow patentability over any cited references. The amended claims are claiming the same scope as the originally filed claims, and have not been narrowed by the amendments.

No Disclaimers or Disavowals

Although the present communication may include alterations to the claims, the Applicants are not conceding in this application that previously pending claims are not patentable. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

Conclusion

Claims 1 – 10 are pending. Claims 1 – 10 are Currently amended. Claims 4 – 7 and 9 are Withdrawn.

Payment for a 1-month Extension Fee is submitted with this Response. No fees are believed due; however, the Commissioner is authorized to charge any additional fees now and in the future which may be due, including any fees for additional extension of time, or credit overpayment to credit card information.

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